Terms used: **watermark compression parameter filter** Found **165** of **210,707**

Sort results by: relevance
Display results: expanded form
Save results to a Binder
Search Tips
Open results in a new window

Try an Advanced Search
Try this search in The ACM Guide

Results 1 - 20 of 165 Result page: **1** 2 3 4 5 6 7 8 9 next

Relevance scale

1 A survey of RST invariant image watermarking algorithms

Dong Zheng, Yan Liu, Jiying Zhao, Abdulmotaleb El Saddik
July 2007 **ACM Computing Surveys (CSUR)**, Volume 39 Issue 2
Publisher: ACM Press
Full text available: pdf(5.53 MB) Additional Information: full citation, abstract, references, index terms

In this article, we review the algorithms for rotation, scaling and translation (RST) invariant image watermarking. There are mainly two categories of RST invariant image watermarking algorithms. One is to rectify the RST transformed image before conducting watermark detection. Another is to embed and detect watermark in an RST invariant or semi-invariant domain. In order to help readers understand, we first introduce the fundamental theories and techniques used in the existing RST invariant ...

Keywords: Digital image watermarking, Fourier-Mellin transform, ILPM, LPM, RST invariant, Radon transform, feature points, moments, template matching

2 A secure semi-fragile watermarking for image authentication based on integer wavelet transform with parameters

Xiaoyun Wu, Junquan Hu, Zhixiong Gu, Jiwu Huang
January 2005 **Proceedings of the 2005 Australasian workshop on Grid computing and e-research - Volume 44 ACSW Frontiers '05**
Publisher: Australian Computer Society, Inc.
Full text available: pdf(304.75 KB) Additional Information: full citation, abstract, references, index terms

Semi-fragile watermark fragile to malicious modifications while robust to incidental manipulations is drawing many attentions in image authentication. However, watermark security has not received enough attention yet. Lifting scheme can construct second generation wavelets. With regard to the first generation wavelets, its implementation is easier, simpler and faster than the Mallat algorithm. In this paper, we propose a novel semi-fragile watermarking scheme for image authentication based on in ...

Keywords: image authentication, integer wavelet transform, parameterization, semi-fragile watermark, watermark security

3 Posters and Short Papers: Robust digital image watermarking using DWT, DFT and quality based average

Eduardo Fullea, José M. Martnez
October 2001 **Proceedings of the ninth ACM international conference on Multimedia MULTIMEDIA '01**
Publisher: ACM Press

Full text available: pdf(529.47 KB) Additional Information: full citation, abstract, references, citings, index terms

This paper presents a digital image watermarking system that complements a wavelet based insertion module, with a resynchronization module, and a method for selecting the watermark using an estimated-quality-based average. The proposed system has been tested with attacks performed by Stirmark, obtaining results of robustness over 90%.

Keywords: DFT, DWT, estimated quality based average, stirmark, watermark

4 Encryption: Parameterized biorthogonal wavelet lifting for lightweight JPEG 2000 transparent encryption
Dominik Engel, Andreas Uhl
August 2005 **Proceedings of the 7th workshop on Multimedia and security MM&Sec '05**
Publisher: ACM Press

Full text available: pdf(1.24 MB) Additional Information: full citation, abstract, references, index terms

Lightweight encryption offers a cogent alternative to full encryption of visual content in application settings with clients of low processing power, e.g. mobile applications, as it counterbalances security demands and computational demands. We present a lightweight transparent encryption scheme for JPEG 2000 that is based on and integrated into the wavelet lifting scheme. Keys are constructed from parameterized biorthogonal filters. The proposed method comes at extremely low computational cost ...

Keywords: JPEG 2000, lightweight encryption, parameterized biorthogonal wavelet lifting, transparent encryption

5 Multimedia and Visualization (MV): A robust watermarking system based on *SVD* compression
Maria Calagna, Huiping Guo, Luigi V. Mancini, Sushil Jajodia
April 2006 **Proceedings of the 2006 ACM symposium on Applied computing SAC '06**
Publisher: ACM Press

Full text available: pdf(871.94 KB) Additional Information: full citation, abstract, references, index terms

Digital watermarking can be used to protect the intellectual property for multimedia data. In this paper, we introduce an image watermarking scheme based on the SVD (*Singular Value Decomposition*) compression. In particular, we divide the cover image into blocks and apply the SVD to each block; the watermark is embedded in all the non-zero singular values according to the local features of the cover image so as to balance embedding capacity with distortion. The watermarking system we propo ...

Keywords: digital watermarking, image compression, singular value decomposition

6 Robust digital watermarking: Robust DWT-SVD domain image watermarking: embedding data in all frequencies
Emir Ganic, Ahmet M. Eskicioglu
September 2004 **Proceedings of the 2004 workshop on Multimedia and security MM&Sec '04**
Publisher: ACM Press

Full text available: pdf(4.84 MB) Additional Information: full citation, abstract, references, citings, index terms

Protection of digital multimedia content has become an increasingly important issue for content owners and service providers. As watermarking is identified as a major technology to achieve copyright protection, the relevant literature includes several distinct approaches for embedding data into a multimedia element (primarily images, audio, and video). Because of its growing popularity, the Discrete Wavelet Transform (DWT) is commonly used in recent watermarking schemes. In a DWT-based scheme, t ...

Keywords: copyright protection, discrete wavelet transform, image watermarking, multimedia, singular value decomposition, visual watermark

7 Digital rights management and watermarking: Tamper proofing and attack identification of corrupted image by using semi-fragile multiple-watermarking algorithm

Soo-Chang Pei, Yi-Chong Zeng

March 2006 **Proceedings of the 2006 ACM Symposium on Information, computer and communications security ASIACCS '06**

Publisher: ACM Press

Full text available: pdf(622.66 KB) Additional Information: full citation, abstract, references, index terms

We propose a novel semi-fragile multiple-watermarking algorithm based on quantization index modulation. This algorithm utilizes two quantization steps to yield the non-uniform intervals in the real-number axis. Each interval corresponds to one binary symbol, includes stable-zero (S0), unstable-zero (U0), stable-one (S1), and unstable-one (U1). In addition, visual cryptography is integrated with the watermarking algorithm to increase the watermark capac ...

Keywords: attack identification, multiple-watermark, semi-fragile watermarking, tamper proofing, visual cryptography

8 Robust digital watermarking: Digital image watermarking using complex wavelet transform

Nataša Terzija, Walter Geisselhardt

September 2004 **Proceedings of the 2004 workshop on Multimedia and security MM&Sec '04**

Publisher: ACM Press

Full text available: pdf(713.64 KB) Additional Information: full citation, abstract, references, index terms, review

In this paper a new robust digital image watermarking method based on the Complex Wavelet Transform is presented. For improving its robustness features in the algorithm design the Error Correction Code is used. The technique is performed in spatial domain. The Complex wavelet transform is firstly used to adapt the watermark to the local image activity by using the visual masking. Secondly it is implemented to select the embedding space (embedding channels). The two embedding channels are obtaine ...

Keywords: attacks, complex wavelet transform, image processing, robust algorithms, watermarking

9 Audio: An SVD-based audio watermarking technique

Hamza Özer, Bülent Sankur, Nasir Memon

August 2005 **Proceedings of the 7th workshop on Multimedia and security MM&Sec**

'05
Publisher: ACM Press

Full text available: pdf(283.33 KB) Additional Information: full citation, abstract, references, citings, index terms

We present a non-oblivious, extremely robust watermarking scheme for audio signals. The watermarking algorithm is based on the SVD of the spectrogram of the signal. The SVD of the spectrogram is modified adaptively according to the information to be watermarked. The algorithm is tested for inaudibility performance with audio quality measures and robustness tests with audio Stirmark benchmark tool, which have a variety of common signal processing distortions. The comparison with a DCT based non-o ...

Keywords: singular value decomposition, watermarking

10 Benchmarking and attacks: A symbolic transform attack on lightweight encryption based on wavelet filter parameterization
Dominik Engel, Rade Kutil, Andreas Uhl
September 2006 **Proceeding of the 8th workshop on Multimedia and security MM&Sec '06**
Publisher: ACM Press

Full text available: pdf(569.92 KB) Additional Information: full citation, abstract, references, index terms

We present a family of attacks on lightweight encryption schemes for visual data that rely on wavelet filter parameterizations to provide security. All of the attacks construct a symbolic representation of the inverse wavelet transform. We show that this representation can be used in ciphertext-only attacks, known-plaintext attacks and in attacks in which some information on the plaintext is available. We investigate the success and feasibility of each of these attacks, and conclude that the pre ...

Keywords: JPEG2000, attack, ciphertext-only, known-plaintext, secret frequency domain, secret parameterized wavelet filters

11 Coding and Encryption: An image watermarking technique using pyramid transform
Qiang Cheng, Thomas S. Huang
October 2001 **Proceedings of the ninth ACM international conference on Multimedia MULTIMEDIA '01**
Publisher: ACM Press

Full text available: pdf(1.90 MB) Additional Information: full citation, abstract, references, citings, index terms

An image watermarking technique based on pyramid transforms is proposed. An arbitrary binary pattern is formed into an effective hypothesized pattern and transmitted as a watermark. Multiresolution pyramid transforms are applied to host images, whose characteristics are exploited to embed the watermark. The detector is designed to be effective to a wide range of original signal sources and noise sources. The scheme is designed to achieve efficient trade-offs between perceptual invisibility, robu ...

Keywords: pyramid transfrom, verification coding, watermarking

12 Multimedia and visualization track: Improved SVD-DWT based digital image watermarking against watermark ambiguity
Erkan Yavuz, Ziya Telatar
March 2007 **Proceedings of the 2007 ACM symposium on Applied computing SAC '07**
Publisher: ACM Press

Full text available: pdf(409.66 KB) Additional Information: full citation, abstract, references, index terms

Singular Value Decomposition (SVD) has been used as a valuable transform technique for robust digital watermarking. This arises from the fact that, changing singular values (SV) of an image slightly does not affect the image quality much. In some SVD based methods, SVs of the watermark are embedded into SVs of the cover image. Then in detection, the watermark is constructed by using original singular vectors. If the singular vectors of another image rather than the original watermark are used ...

Keywords: digital image watermarking, discrete wavelet transform, multimedia security, singular value decomposition

13 Digital watermarking approaches I: A compressed-domain watermarking algorithm for mpeg audio layer 3

D. K. Koukopoulos, Y. C. Stamatiou

October 2001 **Proceedings of the 2001 workshop on Multimedia and security: new challenges MM&Sec '01**

Publisher: ACM Press

Full text available: pdf(483.56 KB) Additional Information: full citation, abstract, references

In this work, we present a digital watermarking scheme for mpeg audio layer 3 audio files that operates directly in the compressed data while manipulating the time and subband/channel domain. In addition, it does not need the original signal to detect the watermark. Our scheme overcomes the disadvantage of algorithms operating in the PCM-Data domain to be vulnerable to compression/recompression attacks, as it places the watermark in the scale factors domain and not in the digitized sound audi ...

Keywords: NP-completeness, audio watermarking, hard instances, mpeg audio layer 3, threshold phenomena

14 Digital watermarking approaches II: Watermarking security enhancement using filter parametrization in feature domain

M. A. Suhail, M. M. Dawoud

October 2001 **Proceedings of the 2001 workshop on Multimedia and security: new challenges MM&Sec '01**

Publisher: ACM Press

Full text available: pdf(357.45 KB) Additional Information: full citation, abstract, references

In this paper we propose to use a secret key in feature domain. The secret key will be implemented using wavelet parameterization filters (WPF). This will improve the security of digital watermarking schemes operating in feature domain. The paper implements WPF into feature domain algorithm done by Kutter. Results show improvement of watermarking security of the feature domain algorithm using WPF without affecting the robustness and the invisibility of the feature domain algorithm.

Keywords: digital watermarking security, feature domain, wavelet parameterization

15 Watermarking: Improved watermark detection for spread-spectrum based watermarking using independent component analysis

Hafiz Malik, Ashfaq Khokhar, Rashid Ansari

November 2005 **Proceedings of the 5th ACM workshop on Digital rights management DRM '05**

Publisher: ACM Press
Full text available: pdf(434.70 KB) Additional Information: full citation, abstract, references, index terms

This paper presents an efficient blind watermark detection/decoding scheme for spread spectrum (SS) based watermarking, exploiting the fact that in SS-based embedding schemes the embedded watermark and the host signal are mutually independent and obey non-Gaussian distribution. The proposed scheme employs the theory of independent component analysis (ICA) and posed the watermark detection as a blind source separation problem. The proposed ICA-based blind detection/decoding scheme has been simula ...

Keywords: blind source separation, correlation, detection, independent component analysis, spread spectrum, watermarking

16 Audio watermarking for monitoring and copy protection
Jaap Haitsma, Michiel van der Veen, Ton Kalker, Fons Bruekers
November 2000 **Proceedings of the 2000 ACM workshops on Multimedia MULTIMEDIA '00**
Publisher: ACM Press
Full text available: pdf(313.49 KB) Additional Information: full citation, abstract, references, citings, index terms

Based on existing technology used in image and video watermarking, we have developed a robust audio watermarking technique. The embedding algorithm operates in frequency domain, where the magnitudes of the Fourier coefficients are slightly modified. In the temporal domain, an additional scale parameter and gain function are necessary to refine the watermark and achieve perceptual transparency. Watermark detection relies on the Symmetrical Phase Only Matched Filtering (SPOMF) cross-correlation ...

Keywords: audio, broadcast monitoring, copy protection, watermark detection, watermark embedding

17 Authentication II: Audio watermarking algorithm for real-time speech integrity and authentication
Song Yuan, Sorin A. Huss
September 2004 **Proceedings of the 2004 workshop on Multimedia and security MM&Sec '04**
Publisher: ACM Press
Full text available: pdf(259.52 KB) Additional Information: full citation, abstract, references, index terms

Data integrity and source origin authentication are essential topics for real-time multimedia systems. But traditional method, such as MAC, is not very applicable to overcome the distortion introduced in real-time multimedia communication. In this paper a new integrity mechanics deploying speech watermarking is presented. The advocated approach adopts public key encryption to efficiently generate non-repudiate speech. In the last part of the article, a speech watermarking algorithm incorporating ...

Keywords: integrity and source origin authentication, real-time multimedia communication and internet telephony, speech watermarking

18 Performance factors analysis of a wavelet-based watermarking method
Chaw-Seng Woo, Jiang Du, Binh Pham
January 2005 **Proceedings of the 2005 Australasian workshop on Grid computing and e-research - Volume 44 ACSW Frontiers '05**

Publisher: Australian Computer Society, Inc.
Full text available: pdf(512.86 KB) Additional Information: full citation, abstract, references, index terms

The essential performance metrics of a robust watermark include robustness, imperceptibility, watermark capacity and security. In addition, computational cost is important for practicality. Wavelet-based image watermarking methods exploit the frequency information and spatial information of the transformed data in multiple resolutions to gain robustness. Although the Human Visual System (HVS) model offers imperceptibility in wavelet-based watermarking, it suffers high computational cost. In this ...

Keywords: discrete wavelet transform (DWT), embedding technique, human visual system (HVS), robust image watermark

19 Content-adaptive digital music watermarking based on music structure analysis
Changsheng Xu, Namunu C. Maddage, Xi Shao, Qi Tian
February 2007 **ACM Transactions on Multimedia Computing, Communications, and Applications (TOMCCAP)**, Volume 3 Issue 1
Publisher: ACM Press
Full text available: pdf(583.99 KB) Additional Information: full citation, abstract, references, index terms

A novel content-adaptive music watermarking technique is proposed in this article. To optimally balance inaudibility and robustness when embedding and extracting watermarks, the embedding scheme is highly related to the music structure and human auditory system (HAS). A note-based segmentation method is proposed and used for music vocal/instrumental boundary detection. A multiple bit hopping and hiding scheme with different embedding parameters is applied to vocal and instrumental frames of the ...

Keywords: Content-adaptive, digital watermarking, inaudibility, music structure, note-based segmentation, robustness

20 Technical poster session 3: multimedia tools, end-systems, and applications: A multiple watermarking algorithm based on CDMA technique
Fuhao Zou, Zhengding Lu, Hefei Ling
October 2004 **Proceedings of the 12th annual ACM international conference on Multimedia MULTIMEDIA '04**
Publisher: ACM Press
Full text available: pdf(235.47 KB) Additional Information: full citation, abstract, references, index terms

This paper proposes a multiple watermarking algorithm based on code division multiple access (CDMA) technique. Before the watermark embedded, each user uses his private key as a seed to generate an address code which is subjected to pseudorandom noise distribution. Each watermark is modulated into a carrier signal with its corresponding address code. And then these carrier signals are added to host media (e.g. image, video and audio). During watermark detection, using the same address code, e ...

Keywords: address code, code division multiple access, correlation coefficient, multiple watermarking

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1407	(380/200-202).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/09/16 01:22
L2	87	1 and (@pd > "20070511")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/16 01:47
L3	23	((deriv$3 generat$3) near3 parameter and (watermark supplemental adj data)).clm.	US-PGPUB	OR	ON	2007/09/16 01:57
L4	1	("6574349").PN.	US-PGPUB; USPAT	OR	OFF	2007/09/16 01:57
L5	2553	(713/176).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/09/16 02:02
L6	34	5 and (derive generate) with (parameter filter) same (supplemental adj data watermark)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/16 02:03
L7	84	5 and (deriv$3 generat$3) with (parameter filter) same (supplemental adj data watermark)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/16 02:03
S1	132	linnartz.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/09/16 01:22
S2	5	watermark same (prediction adj filter)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/09 19:41
S3	6652	"20000426".fd.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/09 19:45
S4	0	("9559230").PN.	US-PGPUB; USPAT	OR	OFF	2006/08/09 19:43

EAST Search History

S5	0	("7093286").PN.	US-PGPUB; USPAT	OR	OFF	2006/08/09 19:44
S6	0	"09/559,230"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/09 19:45
S7	0	"20000426".fd. and king-peter-f.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/09 19:48
S8	1	("6141653").PN.	US-PGPUB; USPAT	OR	OFF	2006/08/09 20:32
S9	1	("6308203").PN.	US-PGPUB; USPAT	OR	OFF	2006/08/09 20:32
S10	1937	(713/176).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/09/16 02:02
S11	265	S10 and (parameter filter) same watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 16:29
S12	230	S10 and (@pd > "20060321")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 17:31
S13	48	"6332194"	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 17:31
S14	1	("6332194").PN.	US-PGPUB; USPAT	OR	OFF	2006/08/10 18:19
S15	1139	(380/200-202).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/08/10 18:19
S16	108	S15 and (@pd > "20060321")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/08/10 18:19

EAST Search History

S17	0	(prediction adj filter) same llc adj algorithm and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 15:47
S18	0	(prediction adj filter) same llc and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:02
S19	5	(prediction adj filter) same watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 15:48
S20	6	(prediction adj filter) and watermark. ab.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 15:49
S21	1198	(380/200-202).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/11/21 16:55
S22	3143	((380/200-202) or (713/176)).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/11/21 20:56
S23	59	S21 and (@pd > "20060810")	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 16:56
S24	2092	(713/176).CCLS.	US-PGPUB; USPAT	OR	OFF	2006/11/21 20:56
S25	1	S24 and (lossless adj (coding encoding)) same parameter	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:00
S26	2	S24 and (lossless adj (coding encoding))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:00

EAST Search History

S27	0	(prediction adj filter) same (lossless adj (coding encoding)) and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:02
S28	0	(prediction adj filter) and (lossless adj (coding encoding)) and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:02
S29	56	(prediction adj filter) and (lossless adj (coding encoding))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:06
S30	0	(prediction) and probability adj (table matrix) and (lossless adj (coding encoding)) and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:06
S31	0	probability adj (table matrix) and (lossless adj (coding encoding)) and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:06
S32	19	(lossless adj (coding encoding)) and watermark	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/21 21:06
S33	1	("6574349").PN.	US-PGPUB; USPAT	OR	OFF	2006/11/24 15:19
S34	1	("6157330").PN.	US-PGPUB; USPAT	OR	OFF	2006/11/24 15:21
S35	1	("6690812").PN.	US-PGPUB; USPAT	OR	OFF	2006/11/24 15:21
S36	2	(("6760444") or ("6851050")).PN.	US-PGPUB; USPAT	OR	OFF	2006/11/29 13:02
S37	1	(bean and pavlath and goldner).in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/11/29 14:56

EAST Search History

S38	81	watermark and (huffman arithmetic) adj encoding	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/04 21:46
S39	1	("6885749").PN.	US-PGPUB; USPAT	OR	OFF	2007/05/04 21:47
S40	8	("4638357" | "5377266" | "5515437" | "5636279" | "5706346" | "6122379" | "6154542" | "6215875").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/04 21:47
S41	1	("6332194").PN.	US-PGPUB; USPAT	OR	OFF	2007/05/04 22:01
S42	1	("6122379").PN.	US-PGPUB; USPAT	OR	OFF	2007/05/04 22:01
S43	10	("6122379").URPN.	USPAT	OR	ON	2007/05/04 22:01
S44	10	("6122379").URPN.	USPAT	OR	ON	2007/05/04 22:03
S45	11	("4107458" | "4316055" | "4471164" | "4760600" | "4815130" | "5307412" | "5365588" | "5454039" | "5479512" | "5517614" | "5751859").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/04 22:04
S46	4	concryption	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2007/05/05 13:24
S47	10	("6122379").URPN.	USPAT	OR	ON	2007/05/05 13:28
S48	0	arithmetic adj encoder same (scramble change flip alter) with coefficient	USPAT	OR	ON	2007/05/05 13:28
S49	0	arithmetic adj encoder same (scrambl$3 chang$3 flip$4 alter$3 replac$3 permut$3) with coefficient	USPAT	OR	ON	2007/05/05 13:30
S50	0	arithmetic adj coder same (scrambl$3 chang$3 flip$4 alter$3 replac$3 permut$3) with coefficient	USPAT	OR	ON	2007/05/05 13:31
S51	11	arithmetic adj coder same (scrambl$3 chang$3 flip$4 alter$3 replac$3 permut$3) with probability	USPAT	OR	ON	2007/05/05 13:34
S52	1	adaptive adj modeler same (scrambl$3 chang$3 flip$4 alter$3 replac$3 permut$3) with probability	USPAT	OR	ON	2007/05/05 13:34
S53	0	(adaptive arithmetic) adj (encoder modeler coder) same (watermark$3 scrambl$ encrypt$3) with (coefficient probability code)	USPAT	OR	ON	2007/05/05 13:35

EAST Search History

S54	0	((adaptive arithmetic) adj (encoder modeler coder)) same (watermark$3 scrambl$ encrypt$3) with (coefficient probability code)	USPAT	OR	ON	2007/05/05 13:35
S55	1	((adaptive arithmetic) adj (encoder modeler coder)) same (watermark$3 scrambl$ encrypt$3)	USPAT	OR	ON	2007/05/05 13:43
S56	111	((adaptive arithmetic huffman) adj (encod$3 model$3 cod$3)) same (watermark$3 scrambl$ encrypt$3)	USPAT	OR	ON	2007/05/05 13:44
S57	32	("5377266").URPN.	USPAT	OR	ON	2007/05/05 14:37
S58	1320	(380/200-202).CCLS.	US-PGPUB; USPAT	OR	OFF	2007/05/05 14:37
S59	120	S58 and (@pd > "20061124")	US-PGPUB; USPAT	OR	ON	2007/05/05 14:38
S60	1	("6885749").PN.	US-PGPUB; USPAT	OR	OFF	2007/05/08 21:39
S61	8	("4638357" | "5377266" | "5515437" | "5636279" | "5706346" | "6122379" | "6154542" | "6215875").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/05/08 21:39
S62	10	("6122379").URPN.	USPAT	OR	ON	2007/05/08 21:40
S63	357	watermark and (modify modification alter$2 chang$3 transform$3) near4 parameter	USPAT	OR	ON	2007/05/08 21:42